

IN THE CLAIMS:

1. (Currently Amended) A process for initiating a reaction between methanol and hydrogen peroxide in the presence of a catalyst to produce a gas, which comprises contacting methanol and hydrogen peroxide in the liquid phase and at a pressure equal to or above atmospheric pressure in the presence of ~~athe~~ catalyst comprising at least one group 8, 9, 10 or 11 transition metal, ~~whereby the methanol reacts with the hydrogen peroxide in the presence of said catalyst~~ selected from the group consisting of nickel, cobalt, copper, silver, iridium, gold, palladium, ruthenium, rhodium and platinum to initiate reaction between said methanol and said hydrogen peroxide to produce said gas.

2. (Canceled)

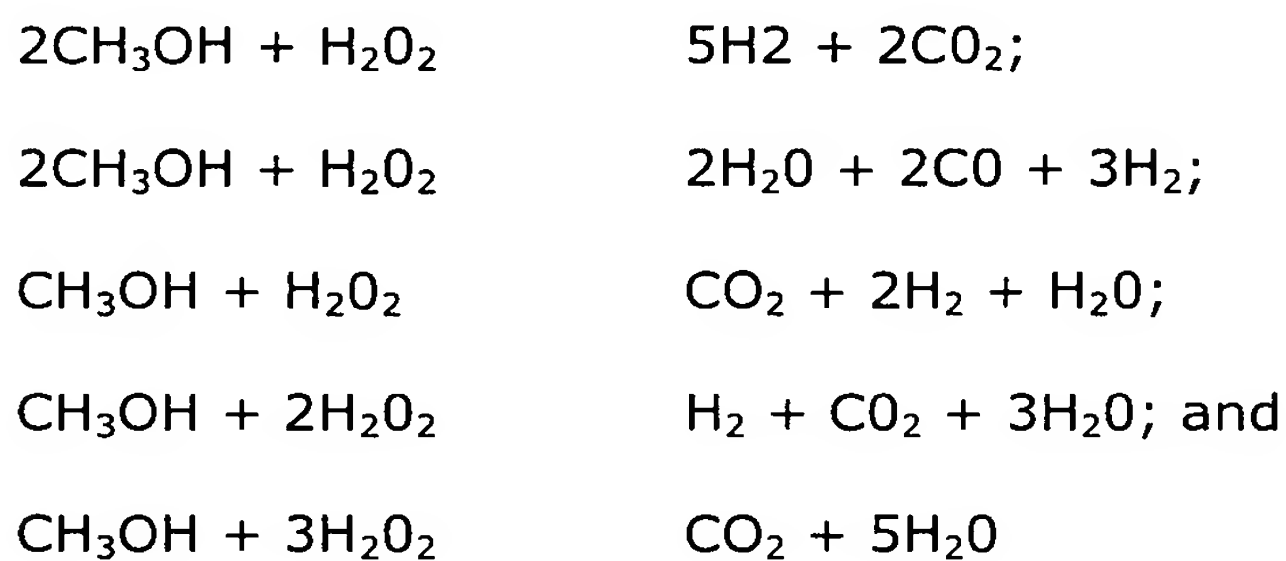
3. (Previously Presented) The process according to claim 1, wherein the hydrogen peroxide is in the form of an aqueous solution, an alcohol solution or urea pellets comprising at least 6 vol% hydrogen peroxide.

4. (Previously Presented) The process according to claim 1, wherein the reaction between methanol and hydrogen peroxide produces at least one product selected from the group consisting of hydrogen, carbon dioxide, carbon monoxide, methane and oxygen.

5. (Previously Presented) The process according to claim 1, wherein the methanol and hydrogen peroxide are present in a molar ratio of 2.5:1 to 1:3.

6. (Previously Presented) The process according to claim 5, wherein the methanol and hydrogen peroxide are present in a molar ratio of about 1:1.

7. (Previously Presented) The process according to claim 6, wherein the reaction comprises at least one of:



8. (Cancel)

9. (Previously Presented) The process according to claim 1, wherein the metal is in metallic form.

10. (Previously Presented) The process according to claim 1, wherein the catalyst contains one or more catalyst promoters.

11. (Previously Presented) The process according to claim 1, wherein the initiation is carried out without heating the reactants.

12. (Previously Presented) The process according to claim 1, wherein the initiation is carried out at a temperature of less than 80° C.

13. (Previously Presented) The process according to claim 1, wherein the initiation is carried out at a temperature of less than 30° C.

14. (Previously Presented) The process according to claim 13, wherein the initiation is carried out at about room temperature.

15. (Previously Presented) The process as claimed in claim 1, which further comprises reforming an organic feed to produce a product stream comprising carbon dioxide, hydrogen and optionally carbon monoxide.

16. (Currently Amended) The process as claimed in claim 15, wherein the organic feed is ~~selected from~~ at least one ~~of~~ selected from the group consisting of an alcohol and a hydrocarbon.

17. (Previously Presented) The process as claimed in claim 15, wherein any carbon monoxide produced in the reforming step is converted into carbon dioxide by contacting the product stream with a water gas shift catalyst in the presence of water.

18. (Previously Presented) The process according to claim 1, which is carried out in a fuel cell, to power a rocket or to inflate an air bag, to pressurize mechanical equipment or for the quick start up of catalytic exhausted gas converter or NO_x purifier.

19-21. (Canceled)